



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**

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www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Derbigum Americas, Inc.
4800 Blue Parkway
Kansas City, MO 64130

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Performance Modified Roof Systems over Recover Applications

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA# 14-0127.09 and consists of pages 1 through 22.
The submitted documentation was reviewed by Alex Tigera.

Alex Tigera
5/4/16



NOA No 14-0627.11
Expiration Date: 08/23/17
Approval Date: 09/10/15
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ROOFING ASSEMBLY APPROVAL

Category:	Roofing
Sub-Category:	APP Modified Bitumen
Deck Type:	Recover
Maximum Design Pressure	See specific system assembly
Fire Classification:	See General Limitation #1

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Derbigum GP	33'4" x 39.4"; roll weight: 90 lbs.	ASTM D 6223	Modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
Derbigum XPS	33'4" x 39.4"; roll weight: 90 lbs.	ASTM D 6223	Modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
Derbicolor GP	33'4" x 39.4"; roll weight: 100 lbs.	ASTM D 6223	Mineral surfaced modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
Derbicolor XPS	33'4" x 39.4"; roll weight: 100 lbs.	ASTM D 6223	Mineral surfaced modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
Derbigum GP-FR	33'4" x 39.4"; roll weight: 90 lbs.	ASTM D 6223	Fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
Derbigum XPS-FR	33'4" x 39.4"; roll weight: 90 lbs.	ASTM D 6223	Fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
Derbicolor GP-FR	33'4" x 39.4"; roll weight: 100 lbs.	ASTM D 6223	Mineral surfaced fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
Derbicolor XPS-FR	33'4" x 39.4"; roll weight: 100 lbs.	ASTM D 6223	Mineral surfaced fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Derbicolor P-FR	33'4" x 39.4" Weight: 100 lbs	ASTM D 6223	Mineral surfaced fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
Derbibrite	33'4" x 39.4" Weight: 90 lbs.	ASTM 6223	Modified bitumen membrane reinforced with fiberglass/polyester with acrylic coating.
Derbipure	33'4" x 39.4" Weight: 90 lbs.	ASTM 6223	Bitumen free waterproofing membrane reinforced with fiberglass/polyester with acrylic coating.
Derbibase HV	49.5' x 39.4" Weight: 90 lbs	ASTM D5147	APP modified bitumen membrane reinforced with polyester mat.
Derbicolor P	39.4" x 33' roll weight: 103 lbs	ASTM D 6222	Mineral surfaced APP polymer modified bitumen, polyester reinforced membrane
Derbigum P	33' x 39.4 roll weight: 89 lbs	ASTM D 6222	APP polymer modified bitumen polyester reinforced membrane.
Derbibase	66' x 39.4"; roll weight: 90 lbs.	ASTM D 5147	APP modified bitumen glass fiber base sheet for mechanical attachment or Permastic cold adhesive application.
Derbibase Ultra	49.5' x 39.4"roll weight: 102 lbs.	ASTM D5147	APP modified bitumen glass fiber base sheet for mechanical attachment of Permastic cold adhesive application.
PRS Glass Base	108' x 36"; roll weight: 82 lbs.	ASTM D 4601	Asphalt coated fiberglass base sheet for use in hot-mop, mechanically fastened or Permastic cold adhesive application.
PRS Glass Ply IV	180' x 36"; roll weight: 60 lbs.	ASTM D 2178 Type IV	Asphalt coated fiberglass ply sheet for use in hot-mop, or mechanically fastened or Permastic cold adhesive application.
PRS Glass Ply VI	180' x 36"; roll weight: 60 lbs.	ASTM D 2178 Type IV	Asphalt coated fiberglass ply sheet for use in hot-mop or mechanically fastened or Permastic cold adhesive application.
PRS Modified Base	180' x 36" roll weight: 82 lbs.	ASTM D 5147	SBS polymer modified bitumen base sheet.
Bitutak MB	33' x 39.4 roll weight: 89 lbs	ASTM D 6222	APP polymer modified bitumen polyester reinforced membrane.
Bitutak MB (Mineral)	39.4" x 33' roll weight: 103 lbs.	ASTM D 6222	Mineral surfaced APP polymer modified bitumen, polyester reinforced membrane

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Permastic	5-gallon pails 55-gallon drums 350-gallon tanks		Asphalt-based adhesive formulated especially for adhering Derbigum/Derbicolor roofing membranes, Derbibase/Ultra, glass ply sheets and glass base sheets.
Permastic IA	5-gallon pails 55-gallon drums 350-gallon tanks		Asphalt-based adhesive formulated especially for adhering base sheets and Derbiboard insulation to concrete, non-nailable substrates or polyisocyanurate.

APPROVED INSULATIONS:

TABLE 2

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
ACFoam-II	various	TAS 110	Polyisocyanurate foam insulation	Atlas Roofing Corp.
ACFoam-III	various	TAS 110	Polyisocyanurate foam insulation	Atlas Roofing Corporation
DensDeck®, Dens DeckPrime™	various	TAS 110	Water resistant gypsum board	GeorgiaPacific Gypsum LLC
Derbiboard	various	TAS 110	Polyisocyanurate foam insulation	Derbigum Americas, Inc.
Derbiboard CA	various	TAS 110	Polyisocyanurate foam insulation	Derbigum Americas, Inc.
ENRGY 3	various	TAS 110	Polyisocyanurate foam insulation	Johns Manville
ISO 95+ GL	various	TAS 110	Polyisocyanurate/Perlite rigid insulation	Firestone Building Products, Inc.
High Density Wood Fiberboard	various	TAS 110	Wood fiber insulation board	Generic
Multi-Max-3, Multi-Max FA-3	various	TAS 110	Polyisocyanurate foam insulation	Rmax Inc.
Perlite Insulation	various	TAS 110	Perlite insulation board	Generic
SECUROCK Gypsum-Fiber Roof Board	various	TAS 110	Water resistant gypsum board	USG Corporation
Structodeck High Density Fiberboard Roof Insulation	various	TAS 110	Wood fiber insulation board	Blue Ridge Fiberboard, Inc.
Type X Gypsum	various	TAS 110	Fire resistant rates gypsum	Generic
Wood Fiber	various	TAS 110	Wood Fiber Insulation Board	generic



APPROVED FASTENERS:

TABLE 3

<u>Fastener Number</u>	<u>Product Name</u>	<u>Product Description</u>	<u>Dimensions</u>	<u>Manufacturer (With Current NOA)</u>
1.	Dekfast #12, Dekfast Galvalume Steel Hex Plate	Insulation fastener/Plate	Various	SFS Intec.
2.	OlyBond 500	Insulation adhesive	Various	OMG, Inc.
3.	Insta-Stik	Insulation adhesive	Various	Flexible Products
4.	Pliodeck	Insulation adhesive	Various	Ashland Specialty
5.	Trufast #15 EHD Fasteners	Insulation fastener	#15	Altenloh, Brinck & Co., Inc.
6.	Trufast 3" Metal Insulation Plate	Insulation plate	3" round	Altenloh, Brinck & Co., Inc.

APPROVED SURFACING:

TABLE 4

<u>Product</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
APOC 302	TAS 121	Roof coating	APOC, Subsidiary of Gardner
APOC 400	TAS 121	Roof coating	APOC, Subsidiary of Gardner
Karnak #97 AF	TAS 121	Roof coating	Karnak

EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
PRI Construction Materials Technologies	PRS-026-02-01	ASTM D 6222	09/14/12
	PRS-030-02-01	ASTM D 6223	04/15/13
	PRS-033-02-01	ASTM D 6223	04/15/13
	PRS-029-02-01	ASTM D 6222	04/15/13
	PRS-023-02-01	ASTM D 6162	09/14/12
	PRS-037-02-01A	TAS 114	07/06/14
	PRS-043-02-01	TAS 110	11/21/14
	PRS-049-02-03	ASTM D 6223	03/23/15
	PRS-044-02-01	ASTM D 6511	07/30/14
Trinity ERD	P20080.07.11-1	ASTM D 6509-09	07/21/11
	P20080.07.11-2	ASTM D 6509-09	07/21/11
	P20080.09.10-1-R1	ASTM D 6509-09	09/20/10
	P20080.09.10-2	ASTM D 6223	09/09/10
	P20080.09.10-7	ASTM D 6223	09/09/10
	P20080.09.10-6	ASTM D 6223	09/09/10

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EVIDENCE SUBMITTED

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Description</u>	<u>Date</u>
	SC5460.08.14	TAS 114	08/27/14
Exterior Research & Design, LLC	10720.10.97-1	Uplift TAS 114	10/17/97
Factory Mutual Research Corporation	2W3A6.AM	Class 4470	02/21/97
	2Y3A2.AM	Class 4470	02/21/97
	2B5A5.AM	Class 4470	05/14/97
	1D7A4.AM	Class 4470	11/9/98
	2B5A7.AM	Class 4470	03/1/99
	JI3007274	Class 4470	2/7/01
	JI 3003642	Class 4470	2/7/01
	JI 3001472	Class 4470	2/7/01
	J.I. 0X2A3.AM	Class 4470	01/13/93
	JI 3002688	Class 4470	12/11/01
	JI 3014452	Class 4470	07/30/02
	3038554	Class 4470	08/25/10
	3046791	Class 4470	06/03/13
	3044067	Class 4470	05/14/13
	JI 1Y7A5.AM	Windstorm Classification	01/03/96
	JI 3002644	Windstorm Classification	12/22/99
	JI 3017037	Windstorm Classification	03/10/05
	JI 3014692	Windstorm Classification	12/20/02
	JI 3008869	Windstorm Classification	03/19/01
	ID 01669-267	Product Name Change	10/26/05
	ID 1039-267	Product Name Change	07/08/04
	JI 3009502	Windstorm Classification	12/21/00
	JI 2D5A9.AM	Windstorm Classification	06/22/99
	JI 3023458	Windstorm Classification	12/30/05
	JI 3009125	Windstorm Classification	07/30/01
	JI 3011494	Windstorm Classification	08/22/01
	JI 3028039	Windstorm Classification	09/11/06
IRT-ARCON	PC03-001	Uplift TAS 114-95	01/17/03
	PC03-002	Uplift TAS 114-95	01/17/03
Underwriters Laboratories	R13327	Fire Classification	11/23/92
Certified Testing Lab	CTLA 1020W	HVHZ-Hurricane Shelter	03/27/03
Atlantic & Caribbean Roof Consulting	ACRC 06-028	Windstorm Classification	07/26/06

APPROVED ASSEMBLIES

Membrane Type: APP

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/cementitious wood fiber/wood/steel.

System Type A(1): Insulation fully adhered with OlyBond adhesive fastener.

All General and System limitations apply.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Derbiboard, Derbiboard CA, Minimum 1.5" thick	N/A	N/A
ACFoam-II, ACFoam-III Minimum 1.3" thick	N/A	N/A
DensDeck, DensDeck Prime Minimum ¼" thick	N/A	N/A
DensDeck, SECUROCK, High Density Fiberboard, Perlite Minimum ½" thick	N/A	N/A

Note: Insulation shall be adhered to the existing substrate using a heated spray foam application machine with a 1:1 mix ratio of OlyBond dual component polyurethane adhesive at an application rate of 1 gallon per 100 square feet. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of PRS Glass Ply IV, PRS Glass Ply VI, or PRS Modified Base, PRS Glass Base, Derbibase or Derbibase Ultra, or Derbigum GP adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. ± 15% or Permastic adhesive at an application rate of 1.5 to 2gal./sq.

Ply Sheet: (Optional) Derbibase, Derbibase Ultra, or Derbigum GP.

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS, Derbigum/Derbicolor GP-FR or Derbigum/Derbicolor XPS-FR, Bitutak MB, Bitutak MB Mineral torch applied or Permastic adhesive at an application rate of 15. to 2gal/sq. to base sheet.



Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -135 psf. (See General Limitation #9)



Membrane Type: APP
Deck Type 7I: Recover, Insulated
Deck Description: Concrete/cementitious wood fiber/wood/steel.
System Type A(2): Insulation fully adhered with Hot Asphalt.

All General and System limitations apply.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Derbiboard, Derbiboard CA, Minimum 1.5" thick	N/A	N/A
ACFoam-II, ACFoam-III Minimum 1.3" thick-	N/A	N/A

Note: Insulation shall be adhered to the existing substrate in a full mopping of any approved mopping hot asphalt within the EVT range and at a rate of 20-40 lbs/100 ft². Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of PRS Glass Ply IV, PRS Glass Ply VI, or PRS Modified Base, PRS Glass Base, Derbibase or Derbibase Ultra, or Derbigum GP adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. ± 15% or Permastic adhesive at an application rate of 1.5 to 2gal./sq.

Ply Sheet: Derbibase, Derbibase Ultra, or Derbigum GP.

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS, Derbigum/Derbicolor GP-FR, Derbicolor P-FR or Derbigum/Derbicolor XPS-FR, Bitutak MB, Bitutak MB Mineral torch applied or Permastic adhesive at an application rate of 1.5 to 2gal./sq. to base sheet.

Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. ± 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -75 psf. (See General Limitation #9)



Membrane Type: APP

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(3): One or more layers of insulation adhered with approved adhesive over Existing smooth BUR. or smooth APP

All General and System limitations apply.

<u>Base Insulation Layer (Optional)</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
ACFoam-II, ACFoam-III, ENRGY 3, ISO 95 + GL Minimum 1.0" thick	N/A	N/A
<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
<u>Dens Deck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick</u>	N/A	N/A
<u>DuraBoard Minimum 1/2" thick</u>	N/A	N/A

Note: Insulation panels listed are minimum sizes and dimensions. Optional base insulation layer adhered with Olybond 500 applied in 0.5 in. wide beads 12 in. o.c. Top insulation layer adhered with Olybond 500 applied in 0.5 in. wide beads 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of Derbibase, Derbibase Ultra, Derbibase HV, Bitutak MB, Derbigum GP, or Derbigum XPS torch adhered.

Ply Sheet: (Optional) Derbibase, Derbibase Ultra, Derbibase HV, Derbigum GP, Derbigum XPS or Bitutak MB torch adhered.

Membrane: DerbigumGP, Derbicolor GP, Derbigum XPS, Derbicolor XPS, Derbigum GP-FR, Derbicolor GP-FR, Derbicolor P-FR, Derbicolor XPS-FR, Derbibrite, Bitutak MB Mineral, or Bitutak MB torch adhered.

Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. ± 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -77.5 psf. over smooth APP (See General Limitation #9)
-130 psf. over smooth BUR (See General Limitation #9)



Membrane Type: APP

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(4): One or more layers of insulation adhered with approved adhesive over existing smooth surface asphaltic BUR; membrane torch adhered.

All General and System limitations apply.

<u>Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/F²</u>
<u>DensDeck Prime</u> Minimum 1/4" thick	N/A	N/A

Note: Insulation panels listed are minimum sizes and dimensions. Base insulation layer adhered with Olybond 500 applied in 0.5 in. wide beads 12 in. o.c. Top insulation layer adhered with Olybond 500 applied in 0.5 in. wide beads 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of Derbibase, Derbibase Ultra, Derbibase HV, Bitutak MB, Derbigum GP or Derbigum XPS torch adhered.

Ply Sheet: (Optional) Derbibase, Derbibase Ultra, Derbibase HV, Derbigum GP, Derbigum XPS or Bitutak MB torch adhered.

Membrane: Derbigum GP, Derbicolor GP, Derbigum XPS, Derbicolor XPS, Derbigum GP-FR, Derbicolor GP-FR, Derbicolor P-FR, Derbicolor XPS-FR, Derbibrite, Bitutak MB Mineral, or Bitutak MB torch adhered.

Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. ± 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -210 psf. (See General Limitation #9)



Membrane Type: APP

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/cementitious wood fiber/wood/steel.

System Type B(1): Base layers of insulation mechanically fastened, optional top layer adhered with approved asphalt or Permastic, or Permastic IA

All General and System limitations apply.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Derbiboard, Derbiboard CA, Minimum 1.5" thick	1	1:3 ft²
ACFoam-II Minimum 1.3" thick	1	1:3 ft²
ACFoam-III Minimum 1.3" thick	1	1:4 ft²
Multi-Max Minimum 1.5" thick	1	1:2.9 ft²
Perlite Minimum ½" thick	1	1:2 ft²
DensDeck, DensDeck Prime Minimum ¼" thick	1	1:2.7 ft²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Derbiboard, Derbiboard CA, AC-Foam II, AC-Foam III Minimum 1.5" thick	N/A	N/A
Perlite Minimum ½" thick	N/A	N/A

Note: Apply top layer of insulation in a full mopping of any approved mopping asphalt within the EVT range at 20-40 lbs/100 ft². Or Permastic or Permastic Adhesive at an application rate of 1-1/2 to 2 gal/sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment. Insulation listed as Base Layer only shall be used as base layers with a second layer of approved top layer insulation installed as the final membrane substrate. Composite insulation panels may be used as a top layer placed with the polyisocyanurate side facing down.



Base Sheet:	One ply of PRS Glass Ply IV, PRS Glass Ply VI, or PRS Modified Base, PRS Glass Base, Derbibase or Derbibase Ultra, or Derbigum GP adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. \pm 15% or Permastic adhesive at an application rate of 1.5 to 2gal./sq.
Ply Sheet:	(Optional) One or two plies of PRS Glass Ply IV, PRS Glass Ply VI, PRS Modified Base, PRS Glass Base, Derbibase or Derbibase Ultra, Derbigum GP adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. \pm 15% or Permastic adhesive at an application rate of 1.5 to 2gal./sq.
Membrane:	Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS, Derbigum/Derbicolor GP-FR, Derbicolor P-FR, or Derbigum/Derbicolor XPS-FR, Bitutak MB, Bitutak MB Mineral torch applied or Permastic adhesive at an application rate of 15. to 2gal./sq. to base sheet.
Surfacing:	Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR or Derbicolor XPS-FR: <ol style="list-style-type: none"> 1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%. 2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq
Maximum Design Pressure:	-45 psf. (See General Limitation #9). -75 psf. Hot Asphalt and Polyisocyanurate (See General Limitation #9)

Membrane Type: APP
Deck Type 7I: Recover, Insulated
Deck Description: Concrete/cementitious wood fiber/wood/steel.
System Type C(1): All layers of insulation simultaneously attached.

All General and System limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Derbiboard, Derbiboard CA, ACFoam-II, ACFoam-III , Multi-Max-3 Minimum 1.5" thick	N/A	N/A
ACFoam-II, ACFoam-III Minimum 1.3" thick	N/A	N/A
DensDeck Prime Minimum ¼" thick	N/A	N/A

Note: All insulation layers shall be simultaneously fastened; see Top Layer below for fasteners and density.

<u>Top Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Derbiboard, Derbiboard CA, ACFoam-II, ACFoam-III Minimum 1.5" thick	1	1:2 ft ²
Derbiboard CA, AC-Foam III Minimum 1.3" thick	1	1:2 ft ²
Perlite Insulation Minimum ¼" thick	1	1:2 ft ²
ACFoam-II Minimum 1.3" thick	1	1:2 ft ²
DensDeck Prime Minimum ¼" thick	1	1:2 ft ²

Note: All layers of insulation shall be mechanically attached using the fastener density listed above. The insulation panels listed are minimum sizes and dimensions; if larger panels are used, the number of fasteners shall be increased maintaining that same fastener density. Insulation fasteners shall be tested for withdrawal resistance in compliance with Testing Application Standard TAS 105 to confirm compliance with the wind load requirements. Please refer to Roofing Application Standard RAS 117 for insulation attachment.



- Base Sheet:** One ply of PRS Glass Ply IV, PRS Glass Ply VI, or PRS Modified Base, PRS Glass Base, Derbibase or Derbibase Ultra, or Derbigum GP adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. \pm 15% or Permastic adhesive at an application rate of 1.5 to 2gal./sq.
- Ply Sheet:** (Optional) One or two plies of PRS Glass Ply IV, PRS Glass Ply VI, PRS Modified Base, PRS Glass Base, Derbibase or Derbibase Ultra, Derbigum GP adhered to the insulated substrate with a full mopping of approved mopping asphalt at an application rate of 25 lb./sq. \pm 15% or Permastic adhesive at an application rate of 1.5 to 2gal./sq.
- Membrane:** Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS, Derbigum/Derbicolor GP-FR, Derbicolor P-FR, Derbigum/Derbicolor XPS-FR, Bitutak MB, or Bitutak MB Mineral torch applied or Permastic adhesive at an application rate of 15. to 2gal./sq. to base sheet.
- Surfacing:** Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:
1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%.
 2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq
- Maximum Design Pressure:** -45 psf. (See General Limitation #9)

Membrane Type: APP

Deck Type 7I: Recover, Insulated

Deck Description: Minimum 267 psi cellular lightweight concrete over minimum 22 ga., steel deck attached to structural supports spaced 5 ft. o.c. *The steel deck should record a Minimum Characteristic Resistance Force (MCRF) of 180 lbf. when tested with Trufast #15 EHD Fasteners in accordance with TAS 105.

System Type C(2): Insulation mechanically fastened over existing roof.

All General and System limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners</u> <u>(Table 3)</u>	<u>Fastener Density/ft²</u>
SECUROCK Gypsum-Fiber Roof Board Minimum 1/2" thick	6 with 7	1:1.33 ft²

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density. Refer to Roofing Application RAS 117 for insulation attachment requirements.

Base Sheet: One ply of Derbibase, Derbibase Ultra, Derbibase HV, Bitutak MB, Derbigum GP or Derbigum XPS torch adhered.

Ply Sheet: (Optional) One ply of Derbibase, Derbibase Ultra, Derbibase HV, Bitutak MB, Derbigum GP or Derbigum XPS torch adhered.

Membrane: Derbigum GP, Derbicolor GP, Derbigum XPS, Derbicolor XPS, Derbigum GP-FR, Derbicolor GP-FR, Derbicolor P-FR, Derbicolor XPS-FR, Derbibrite, Bitutak MB Mineral, or Bitutak MB torch adhered.

Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. ± 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -67.5 psf. (See General Limitation #7)



Membrane Type: APP

Deck Type 7I: Recover, Insulated

Deck Description: Concrete/cementitious wood fiber/wood/steel.

System Type D(1): All layers of insulation and base sheet simultaneously attached.

All General and System limitations apply.

One or more layers of any of the following insulations.

<u>Base Insulation Layer</u>	<u>Insulation Fasteners (Table 3)</u>	<u>Fastener Density/ft²</u>
Derbiboard, Derbiboard CA, Multi-Max-3 Minimum 1.5" thick	N/A	N/A
ACFoam-II, ACFoam-III Minimum 1.3" thick	N/A	N/A
Perlite Insulation Minimum ½" thick	N/A	N/A
DensDeck Prime Minimum ¼" thick	N/A	N/A
SECUROCK Minimum ¼" thick	N/A	N/A

Note: All layers of insulation and base sheet shall be simultaneously attached. See base sheet below for fasteners and density. Refer to Roofing Application RAS 117 for insulation attachment requirements. Insulation shall have preliminary attachment, prior to the installation of the roofing membrane. At an application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Base Sheet: One or Two plies of PRS Glass Ply IV, PRS Glass Ply VI, or PRS Modified Base, PRS Glass Base, Derbibase or Derbibase Ultra, or Derbigum GP mechanically fastened to the deck through the insulation as detailed below.

Fastening: Fasten base sheet at a 4" side lap 12" o.c. and two rows staggered in the center of the sheet 18" o.c.. See System Limitation #5.

Ply Sheet: Derbigum GP, Derbibase or Derbibase Ultra

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS, Derbigum/Derbicolor GP-FR, Derbicolor P-FR, or Derbigum/Derbicolor XPS-FR, Bitutak MB, Bitutak MB Mineral torch applied or Permastic adhesive at an application rate of 15. to 2gal/sq. to base sheet.



Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -45 psf. (See General Limitation #9)



Membrane Type: APP
Deck Type 7: Recover
Deck Description: Concrete/cementitious wood fiber/wood/steel.
System Type E(1): Base sheet mechanically fastened.

All General and System limitations apply.

Base Sheet: One ply of PRS Glass Base, PRS Modified Base Sheet, Derbigum GP, Derbibase, Derbibase Ultra mechanically fastened to the deck as detailed below.

Fastening: Fasten base sheet at a 4" side lap 12" o.c. and two rows staggered in the center of the sheet 18" o.c.. See System Limitation #5.

Ply Sheet: Derbigum GP, Derbibase or Derbibase Ultra

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS, Derbigum/Derbicolor GP-FR, Derbicolor P-FR, Derbigum/Derbicolor XPS-FR, Bitutak MB, Bitutak MB Mineral torch applied or Permastic adhesive at an application rate of 15. to 2gal/sq. to base sheet.

Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. \pm 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -45 psf. (See General Limitation #9)

Membrane Type: APP
Deck Type 7: Recover
Deck Description: Concrete/cementitious wood fiber/wood/steel
System Type F(1): Membrane adhered to existing Smooth APP roof

All General and System limitations apply.

Membrane: Derbibrute adhered with Permastic applied at a rate of 1.5 – 2.0 gal/sq. 3” wide side laps are torched adhered.

Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. ± 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -142.5 psf. (See General Limitation #9)

Membrane Type: APP
Deck Type 7: Recover
Deck Description: Concrete/cementitious wood fiber/wood/steel
System Type F(2): Membrane adhered to existing BUR roof

All General and System limitations apply.

Membrane: Derbigum/Derbicolor GP or Derbigum/Derbicolor XPS, Derbigum/Derbicolor GP-FR, Derbicolor P-FR, Derbigum/Derbicolor XPS-FR, Derbibrute or Derbipure adhered with Permastic applied at a rate of 1.5 – 2.0 gal/sq. 3” wide side laps are torched adhered.

Surfacing: Install one of the following (except over Derbigum GP-FR, Derbigum XPS-FR, Derbicolor GP-FR, Derbicolor P-FR, or Derbicolor XPS-FR:

1. Gravel or slag applied at an application rate of 400 lbs. or 300 lbs. respectively adhered to the insulated substrate with approved mopping asphalt at an application rate of 60 lb./sq. ± 15%.
2. APOC 400 applied at 1.3 gal./sq or Karnak #97 AF at an application rate of 1.5 gal./sq. APOC # 302 applied at an application rate of 3 gal./sq

Maximum Design Pressure: -67.5 psf. (See General Limitation #9)

RECOVER SYSTEM LIMITATIONS:

1. All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE

